

In the Claims:

Claims 1-56 (Cancelled)

57. (Currently Amended): A method for loading active agents into liposomes comprising:
- a) providing a liposome comprising a gel-phase lipid bilayer and a liposome interior defined by the gel-phase lipid bilayer, said gel-phase lipid bilayer comprising phospholipid, wherein said gel-phase lipid bilayer is present ~~at a temperature~~ below its phase transition temperature; and
 - b) exposing the gel-phase lipid bilayer to an active agent such that said active agent passes into the gel-phase lipid bilayer to load the liposome interior with the active agent ~~wherein said method allows for an increase in the percentage of active agent released at the phase transition temperature of the liposome membrane, compared to that which would occur in liposomes produced by another method.~~
58. (Cancelled)
59. (Original): A method according to claim 57 wherein the liposome is present in a surrounding liquid medium, and wherein the pH of the surrounding liquid medium is greater than the pH of the interior of the liposome to facilitate loading of the active agent.
60. (Original): A method according to claim 57 wherein the lipid bilayer further comprises a surface active agent.
61. (Currently Amended): A method according to claim 60 wherein the surface active agent is selected from the group consisting of ~~palmitoyl alcohols, stearyl alcohols,~~ myristoyl surfactants, palmitoyl surfactants, stearyl surfactants, polyethylene glycol-derivatized surfactants, glyceryl monopalmitate, glyceryl monooleate, ceramides, PEG-ceramides, polyethylene glycol-polyethylene copolymers, C-18 ether linked lysophosphatidyl choline, ~~block copolymers, therapeutic lipids,~~ and mixtures thereof.

62. (Original): A method according to claim 60 wherein the surface active agent is lysolipid.
63. (Original): A method according to claim 62 wherein the lysolipid is selected from the group consisting of monopalmitoylphosphatidylcholine (MPPC), monolaurylphosphatidylcholine (MLPC), monomyristoylphosphatidylcholine (MMPC), monostearoylphosphatidylcholine (MSPC), and mixtures thereof.
64. (Original): A method according to claim 60, wherein said phospholipid is dipalmitoylphosphatidylcholine (DPPC) and said surface active agent is lysolipid which is monopalmitoylphosphatidylcholine (MPPC).
65. (Cancelled)
66. (New): A liposome, comprising: an active agent and a liposome interior defined by a gel-phase bilayer membrane, wherein the gel-phase bilayer has a phase transition temperature of 39 to 45 °C, and
wherein the gel-phase lipid bilayer membrane comprises:
(a) a first component which is one or more phospholipids selected from the group consisting of phosphatidyl cholines, phosphatidyl glycerols, phosphatidyl inositols, phosphatidyl ethanolamines, and sphingomyelins, wherein the one or more phospholipids have two acyl groups; and
(b) a second component selected from:
(i) one or more surface active agents selected from the group consisting of lysolipids, bile acids, myristoyl surfactants, palmitoyl surfactants, stearoyl surfactants, glyceryl monooleate, ceramides, PEG-ceramides, C18-ether linked lysophosphatidyl choline, polyethylene glycol-polyethylene copolymers, fatty acids, and mixtures thereof; or
(ii) the active agent, wherein the active agent is selected from the group consisting of a pharmacologically active agent, a flavor agent, or a diagnostic agent, or a nutritional agent; and,

(c) wherein the active agent, if absent from the gel-phase lipid bilayer membrane, is present in the liposome interior; and

(d) wherein the amount of the second component in the gel-phase lipid bilayer membrane is sufficient to increase a first percentage of active agent released from the liposome at the phase transition temperature, compared to a second percentage of active agent released in the absence of the second component.

67. (New): The liposome according to claim 66, wherein the second component is the active agent.

68. (New): The liposome according to claim 67, wherein the active agent is a pharmacologically active agent selected from the group consisting of ceramides and platelet activating factor.

69. (New): The liposome according to claim 66, wherein the active material is within the liposome interior.

70. (New): A method of administering an active agent to a preselected target site in a subject's body, comprising:

(a) administering a liposome to the subject, wherein the liposome comprises a gel-phase lipid bilayer membrane having a phase transition temperature and a liposome interior defined by the gel-phase bilayer, and an active agent,

wherein the gel-phase lipid bilayer membrane comprises:

(i) a first component which is one or more phospholipids selected from the group consisting of phosphatidyl cholines, phosphatidyl glycerols, phosphatidyl inositols, phosphatidyl ethanolamines, and sphingomyelins, wherein the one or more phospholipids have two acyl groups; and

(ii) a second component selected from:

(I) one or more surface active agents selected from the group consisting of lysolipids, bile acids, myristoyl surfactants, palmitoyl surfactants, stearyl surfactants, glyceryl monooleate, ceramides, PEG-

ceramides, C18-ether linked lysophosphatidyl choline, polyethylene glycol-polyethylene copolymers, fatty acids, and mixtures thereof; or

(II) the active agent, wherein the active agent is selected from the group consisting of a pharmacologically active agent, a flavor agent, or a diagnostic agent, or a nutritional agent; and,

(iii) wherein the active agent, if absent from the gel-phase lipid bilayer membrane, is present in the liposome interior; and

(iv) wherein the amount of the second component in the gel-phase lipid bilayer membrane is sufficient to increase a first percentage of active agent released from the liposome at the phase transition temperature, compared to a second percentage of active agent released in the absence of the second component; and

(b) heating the subject's preselected target site to a temperature about 39 °C to 45 °C to release the active agent from the liposome at the target site.

71. (New): The method of claim 70, wherein the preselected target site comprises tumor tissue.
72. (New): The method claim 70, wherein the second component is the active agent.
73. (New): The method of claim 72, wherein the second component comprises from 1 to 50 mole percent of the second component.
74. (New): The method of claim 73, wherein the second component comprises from 1 to 30 mole percent of the second component.
75. (New): The method of claim 72, wherein the active agent is selected from the group consisting of apoptotic agents and platelet activating factor.
76. (New): The method according to claim 63, wherein the surface active agent is monostearoylphosphatidylcholine (MSPC).

77. (New): The liposome according to claim 66, wherein the active material is within the liposome interior and in the gel-phase lipid bilayer membrane.
78. (New): The method of claim 72, wherein the active material is within the liposome interior and in the gel-phase lipid bilayer membrane.